



Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to MDH for the week ending March 30, 2019

Prepared by the Division of Infectious Disease Surveillance
Prevention and Health Promotion Administration
Maryland Department of Health

The data presented in this document are provisional and subject to change as additional reports are received.

SUMMARY

During the week ending March 30 2019 influenza-like illness (ILI) intensity in Maryland was **MODERATE** and there was **WIDESPREAD** geographic activity. The proportion of outpatient visits for ILI reported by Sentinel Providers and outpatient visits for ILI reported by Maryland Emergency Departments decreased. The proportion of MRITS respondents reporting ILI increased. Clinical laboratories reported a slight decrease in the proportion of specimens testing positive for influenza. Two hundred and ninety nine specimens tested positive for influenza at the MDH lab. There were 144 influenza-associated hospitalizations. There were nine respiratory outbreaks reported to MDH.

[Click here to visit our influenza surveillance web page](#)

ILI Intensity Levels

Minimal

Low

✓ Moderate

High

Influenza Geographic Activity

No Activity

Sporadic

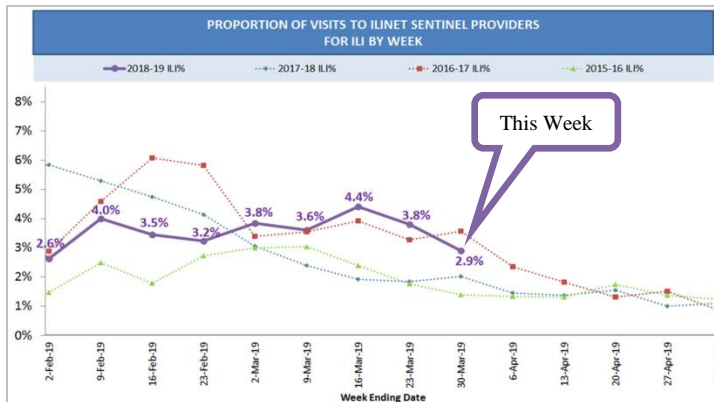
Local

Regional

✓ Widespread

ILINet Sentinel Providers

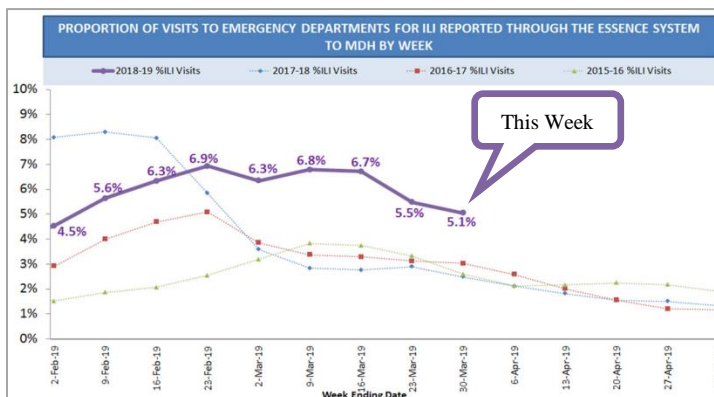
Twenty-three providers reported a total of 7,152 visits this week. Of those, 207 (2.9%) were visits for ILI. This is **above** the Maryland baseline of **2.0%**.



ILI Visits To Sentinel Providers By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	77 (37%)	110 (39%)	1,578 (33%)
Age 5-24	97 (47%)	126 (45%)	1,986 (42%)
Age 25-49	14 (7%)	26 (9%)	612 (13%)
Age 50-64	10 (5%)	12 (4%)	341 (7%)
Age ≥ 65	9 (4%)	6 (2%)	207 (4%)
Total	207 (100%)	280 (100%)	4,724 (100%)

Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 59,656 visits this week through the [ESSENCE surveillance system](#). Of those, 3,013 (5.1%) were visits for ILI.



ILI Visits To Emergency Departments By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	471 (16%)	547 (17%)	10,994 (19%)
Age 5-24	1,026 (34%)	1,039 (32%)	17,387 (30%)
Age 25-49	890 (30%)	998 (31%)	17,642 (31%)
Age 50-64	375 (12%)	415 (13%)	7,245 (13%)
Age ≥ 65	251 (8%)	254 (8%)	3,848 (7%)
Total	3,013 (100%)	3,253 (100%)	57,116 (100%)

Neighboring states' influenza information:

Delaware <http://dhss.delaware.gov/dph/epi/influenzahome.html>

District of Columbia <http://doh.dc.gov/service/influenza>

Pennsylvania <http://www.health.pa.gov/My%20Health/Diseases%20and%20Conditions/I-L/Pages/Influenza.aspx#.V-LtaPkrJD8>

Virginia <http://www.vdh.virginia.gov/epidemiology/influenza-flu-in-virginia/influenza-surveillance/>

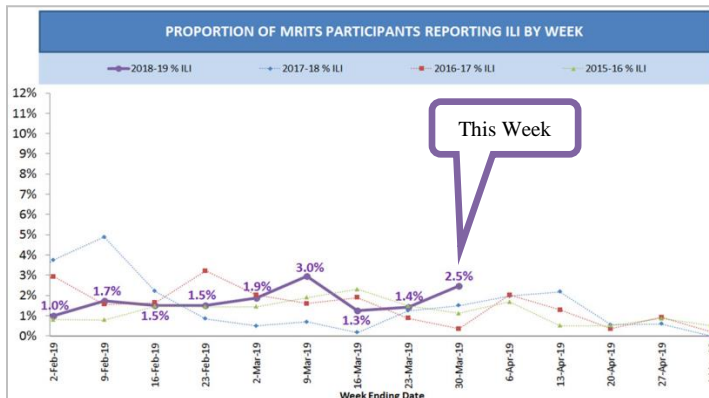
West Virginia <http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx>

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Community-based Influenza Surveillance (MRITS)

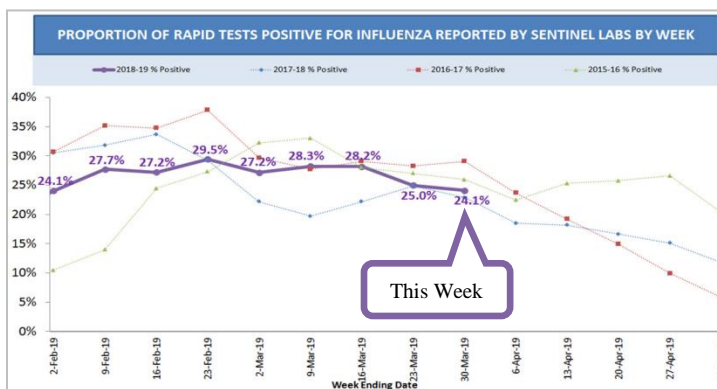
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 605 residents responded to the [MRITS survey](#) this week. Of those, 15 (2.5%) reported having ILI and missing 31 cumulative days of regular daily activities.



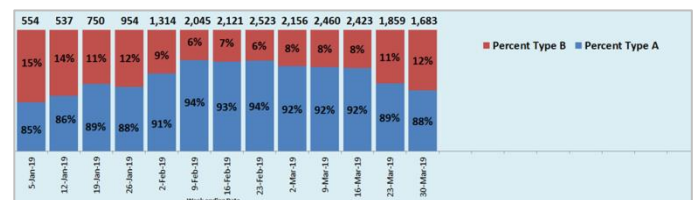
MRITS Respondents Reporting ILI By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	0 (0%)	0 (0%)	13 (6%)
Age 5-24	5 (33%)	2 (25%)	55 (26%)
Age 25-49	2 (13%)	0 (0%)	53 (25%)
Age 50-64	5 (33%)	2 (25%)	49 (24%)
Age ≥ 65	3 (20%)	4 (50%)	38 (18%)
Total	15 (100%)	8 (100%)	208 (100%)

Clinical Laboratory Influenza Testing

There were 65 clinical laboratories reporting 6,987 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 1,683 (24.1%) were positive for influenza. Of those testing positive, 1,473 (88%) were influenza Type A and 210 (12%) were influenza Type B. The [reliability of RIDTs](#) depends largely on the conditions under which they are used. False-positive (and true-negative) results are more likely to occur when the disease prevalence in the community is low, which is generally at the beginning and end of the influenza season and during the summer.

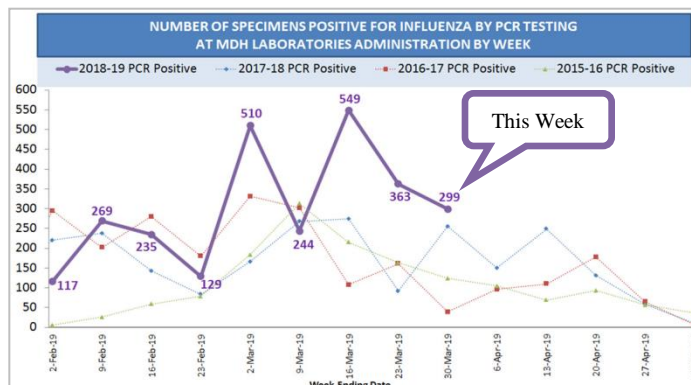


Positive Rapid Flu Tests by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A	1,473 (88%)	1,654 (89%)	20,630 (90%)
Type B	210 (12%)	205 (11%)	2,252 (10%)
Total	1,683 (100%)	1,859 (100%)	22,882 (100%)



State Laboratories Administration Influenza Testing

The MDH Laboratories Administration performed a total of 379 PCR tests for influenza and 299 (78.9%) were positive for influenza. Of those testing positive, 122 (41%) were positive for Type A (H1), 163 (55%) were positive for Type A (H3), 3 (1%) were positive for Type B (Victoria), 10 (3%) were positive for Type B (Yamagata), and 1 (<1%) was positive for dual Type A (H1/H3). PCR testing is more reliable than RIDT. The MDH testing identifies subtypes of influenza A and lineages of influenza B, information that is not available from the RIDT results. The table below summarizes results by type, subtype, and lineage.



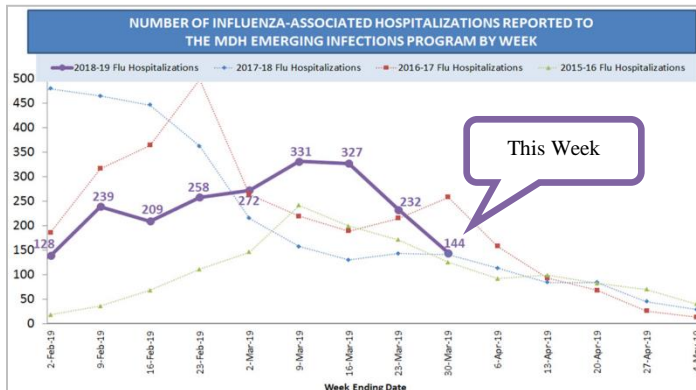
Positive PCR Tests by Type (Subtype)	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A (H1)	122 (41%)	158 (44%)	2,174 (66%)
Type A (H3)	163 (55%)	199 (55%)	1,009 (31%)
Type B (Victoria)	3 (1%)	0 (0%)	66 (2%)
Type B (Yamagata)	10 (3%)	0 (0%)	34 (1%)
Dual Type A (H1/H3)	1 (<1%)	6 (2%)	9 (<1%)
Total	299 (100%)	363 (100%)	3,292 (100%)

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Influenza-associated Hospitalizations

A total of 144 influenza-associated hospitalizations were reported this week. (A person with an overnight hospital stay along with a positive influenza test of any kind, e.g., RIDT or PCR, is considered an “influenza-associated hospitalization” for purposes of influenza surveillance.) This surveillance is conducted as a component of the Maryland Emerging Infections Program.



Influenza-Associated Hospitalizations by Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	5 (3%)	15 (6%)	219 (8%)
Age 5-17	9 (6%)	13 (6%)	149 (5%)
Age 18-24	6 (4%)	6 (3%)	59 (2%)
Age 25-49	21 (15%)	42 (18%)	474 (17%)
Age 50-64	34 (24%)	48 (21%)	739 (27%)
Age ≥ 65	69 (48%)	108 (47%)	1,078 (40%)
Total	144 (100%)	232 (100%)	2,718 (100%)

Influenza-associated Deaths

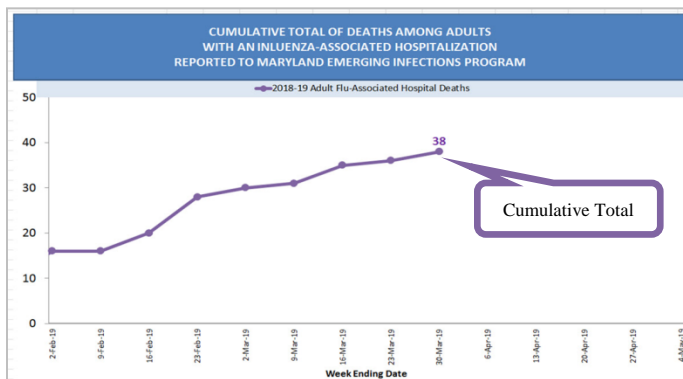
An influenza-associated death is one with a clinically compatible illness and a positive influenza test of any kind.

Pediatric Deaths: The total number of pediatric (< 18 years of age) deaths reported this influenza season is 1.

Influenza-associated pediatric mortality is a reportable condition in Maryland. Pediatric deaths are tracked without regard to hospitalization.

Adult Deaths Among Hospitalized Patients: A cumulative season total of 38 deaths have been reported among adults admitted to Maryland hospitals.

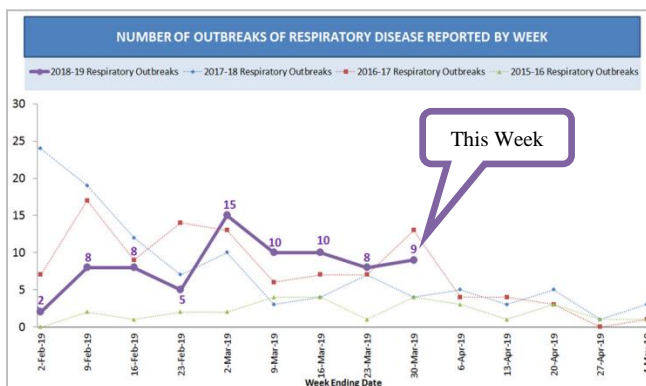
Influenza-associated adult mortality is *not* a reportable condition in Maryland. However, surveillance for mortality in hospitalized adults is conducted as a component of the Maryland Emerging Infections Program.



Influenza-Associated Deaths	Cumulative Season Total
Pediatric Deaths (Age < 18)	1
Adult Deaths (in hospitalized cases)	38

Outbreaks of Respiratory Disease

There were nine respiratory outbreaks reported to MDH this week. (Disease outbreaks of any kind are reportable in Maryland. Respiratory outbreaks may be reclassified once a causative agent is detected, e.g., from ILI to influenza.)



Respiratory Outbreaks by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Influenza	9 (100%)	7 (88%)	75 (70%)
Influenza-like Illness	0 (0%)	0 (0%)	16 (15%)
Pneumonia	0 (0%)	1 (13%)	16 (15%)
Other Respiratory	0 (0%)	0 (0%)	0 (0%)
Total	9 (100%)	8 (100%)	107 (100%)

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National Influenza Surveillance (CDC)

Influenza activity decreased but remains elevated in the United States. Influenza A(H1N1)pdm09 viruses predominated from October to mid-February, and influenza A(H3N2) viruses have been more commonly identified since late February. Small numbers of influenza B viruses have also been reported.

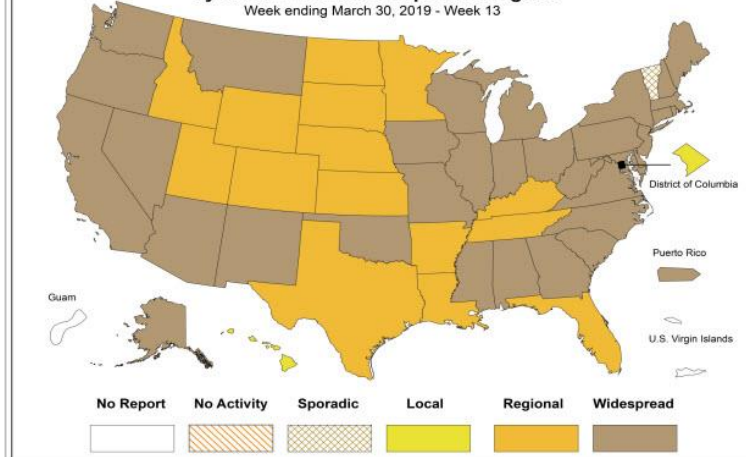
- **Viral Surveillance:** The percentage of respiratory specimens testing positive for influenza viruses in clinical laboratories decreased. Nationally, during the most recent three weeks, influenza A(H3) viruses were reported more frequently than influenza A(H1N1)pdm09 viruses and in all 10 HHS Regions.
- **Influenza-like Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) decreased to 3.2%, and remains above the national baseline of 2.2%. All 10 regions reported ILI at or above their region-specific baseline level.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Puerto Rico and 33 states was reported as widespread; 15 states reported regional activity; the District of Columbia and one state reported local activity; the U.S. Virgin Islands and Guam did not report.
- **Influenza-associated Hospitalizations:** A cumulative rate of 56.4 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. The highest hospitalization rate is among adults 65 years and older (181.8 hospitalizations per 100,000 population).
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was at the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** Six influenza-associated pediatric deaths were reported to CDC during week 13. Five deaths occurred during the 2018-2019 season and one death occurred during the 2017-2018 season.
- **Outpatient Illness Surveillance:** Nationwide during week 13, 3.2% of patient visits reported through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) were due to influenza-like illness (ILI). This percentage is above the national baseline of 2.2%. (ILI is defined as fever (temperature of 100°F [37.8°C] or greater) and cough and/or sore throat.)

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2018-19 Influenza Season Week 13 ending Mar 30, 2019



*This map uses the proportion of outpatient visits to health care providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state to display high activity levels. Data collected in ILINet may disproportionately represent certain populations within a state, and therefore, may not accurately depict the full picture of influenza activity for the whole state. Data displayed in this map are based on data collected in ILINet, whereas the State and Territorial flu activity map is based on reports from state and territorial epidemiologists. The data presented in this map is preliminary and may change as more data are received. Differences in the data presented here by CDC and independently by some state health departments likely represent differing levels of data completeness with data presented by the state likely being the more complete.

Weekly Influenza Activity Estimates Reported
by State & Territorial Epidemiologists*
Week ending March 30, 2019 - Week 13



* This map indicates geographic spread & does not measure the severity of influenza activity

Where to get an influenza vaccination

Interested in getting a flu vaccine for the 2018-19 influenza season? Go to <https://phpa.health.maryland.gov/influenza/Pages/getvaccinated.aspx> and click on your county/city of residence. You will be redirected to your local health department website for local information on where to get your flu vaccine.